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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,726	10/24/2001	Thomas Walburgis Bakker	W422.312-7	8811

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Kinney & Lange
Suite 1500
625 Fourth Avenue South
Minneapolis, MN 55415-1659

EXAMINER	
COLLINS, GIOVANNA M	
ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,726	BAKKER ET AL.	
	Examiner	Art Unit	
	Giovanna M. Collins	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-24 and 26-29 is/are rejected.

7)☒ Claim(s) 25 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 9, line 24 "well head 1" should be changed to - - well head 13 - -.

Appropriate correction is required.

Drawings

2. The drawings are objected to because In Fig. 1 the lead line for the element 8 next to element 5 is not pointing to the tube as described in the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1, 24 and 25 are objected to because of the following informalities:

In line 6 of claim 1, the phrase "said tube from said connecting area towards" should be removed. Appropriate correction is required.

In line 2, of claim 24, the phrase "with." should be changed to - - with, - -.

In lines 4 and 5 of claim 25, the phrase " at partially curved path" should be changed to - - at least partially curved path - -.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 17, and 19-21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Sizer ('345).

Sizer discloses (see Fig. 1) a method for introducing a tube into a borehole in the ground, comprising the actions of comprising said tube (T) by connecting successive tube parts (15) end-to-end in a connecting area (20), and axially displacing at least a composed section of said tube from said connecting area towards said borehole and introducing at least a substantial portion of said tube or said composed section thereof into said borehole, said connecting area being located at least horizontally spaced away from the borehole, and said axial displacement of said tube or said composed section thereof from said connecting area to said borehole proceeding along an at least partially curved path (at 18), characterized in that said connection of successive tube parts end-to-end into said tube is completed before said tube is brought in communication with said borehole.

Referring to claim 2, Sizer discloses wherein said path (18) along which said tube (T) or said composed section thereof is displaced includes at least one complete winding.

Referring to claim 3, Sizer discloses wherein said path (18) along which said tube or said composed section thereof is displaced includes at least a spiral or helical portion (at 18).

Referring to claim 4, Sizer discloses wherein said tube parts (15) are oriented at an angle to a topmost portion of said borehole (at 11) during said connection of said tube parts.

Referring to claim 5, Sizer discloses wherein said tube parts (15) are oriented substantially horizontally during said connection of said tube parts.

Referring to claim 6, Sizer discloses wherein said tube (T) or said composed section thereof is plastically bent to a curved shape (at 18) where it enters a curved portion of said path.

Referring to claim 7, Sizer discloses wherein plastically bent portions of said tube (T) or said composed section thereof are plastically straightened where it leaves said curved portion of said path.

Referring to claim 17, Sizer discloses (see fig 1) a method for retracting or removing (see col. 1, lines 19-30) a tube from a borehole in the ground, comprising the actions of retracting at least a substantial portion of said tube from said borehole, axially displacing said tube from said borehole towards a connecting area (see col. 7, lines 5-8), and disconnecting tube parts from said tube in said connecting area (see col. 7, lines 55-57), said connecting area being located at least horizontally spaced away from the borehole, and that said axial displacement of said tube from said borehole to said connecting area proceeding along an at least partially curved path, characterized in that portions of said tube or said composed section thereof proceeding along said curved path are bent to a curved shape in exclusively one direction relative to that portion of said tube.

Referring to claim 19, Sizer discloses an installation for composing a tube and introducing same via a well head into a borehole in the ground, comprising a connection structure (20) for composing the tube (T) by connecting successive tube parts (15) end-to-end in a connecting area, and a transport structure (16) for axially displacing said tube or a composed section thereof from the connection structure towards the well head (11), and for introducing at least a substantial portion of said tube or said composed section thereof into said well head, said connecting area being located at least horizontally spaced away from said well head, and said

transport structure being arranged for axially displacing said tube or said composed section thereof along an at least partially curved path (at 18), characterized in that said transport structure is arranged for bending each portion of said tube or said composed section thereof to a curved shape in exclusively one direction relative to that portion of said tube.

Referring to claim 20, Sizer discloses wherein said connection structure (20) is provided with a passage (at 25) for receiving a tube part (15) to be connected, said passage being located out of alignment with the well head, and said passage being oriented at an angle with respect to the well head.

Referring to claim 21, Sizer discloses wherein said passage (at 25) is oriented horizontally.

Referring to claim 26, Sizer discloses wherein said transport structure (16) is arranged for keeping said tube (T) in an at least spirally or helically curved configuration.

6. Claims 9-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Priestman et al. ('616).

Priestman et al. disclose (See Fig. 2) a method for introducing a tube into a borehole in the ground, comprising the actions of composing said tube (12) by connecting successive tube parts end-to-end in a connecting area (see col. 4, lines 20-24), and axially displacing at least a composed section of said tube from said connecting area towards said borehole and introducing at least a substantial portion of said tube or said composed section thereof into said borehole, said connecting area being located at least horizontally spaced away from the borehole (see col. 4, lines 20-24), and said axial displacement of said tube or said composed section thereof from

said connecting area to said borehole proceeding along an at least partially curved path (at 29), characterized in that portions of said tube or said composed section thereof proceeding along said curved path are bent into at most one single curve.

Referring to claim 10, Priestman et al. disclose wherein said tube (12) or said composed section thereof is plastically bent to a curved shape where it enters a curved portion of said path, wherein plastically bent portions of said tube or said composed section thereof are plastically straightened (at 15) where it leaves said curved portion of said path, and wherein said plastical straightening of said tube or said composed section thereof when leaving said curved portion of said path occurs a single time at most for each portion of said tube or said composed section thereof.

Referring to claim 11, Priestman et al. disclose herein portions of said tube or said composed section thereof proceeding along a curved section of said path are in an at least elastically deformed condition (see Fig. 2, at element 12 before entering element 28).

Referring to claim 12, Priestman et al. disclose a method for introducing a tube into a borehole in the ground, comprising the actions of composing said tube by connecting successive tube parts end-to-end in a connecting area (see col. 4, lines 20-24), and axially displacing at least a composed section of said tube from said connecting area towards said borehole (11) and introducing at least a substantial portion of said tube or said composed section thereof into said borehole (see Fig. 2), said connecting area being located at least horizontally spaced away from the borehole (see col. 4, lines 20-24), and said axial displacement of said tube or said composed section thereof from said connecting area to said borehole proceeding along an at least partially

curved path (at 28), characterized in that each portion of said tube or said composed section thereof is bent to a curved shape in exclusively one direction relative to that portion of said tube.

Referring to claim 14, Priestman et al. disclose wherein said connecting of said the tube parts is carried out by welding (see col. 4, lines 20-24).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sizer ('345).

Sizer discloses the method according to claim 6 but does not disclose that maximum total deformation during said bending into said curved shape is less than 2%. However, it has been held that where the general conditions of a claim are disclosed in the prior art discovering the optimum range or workable ranges involves only routine skill in the art. In re Killing, 895 F.2d 1147, 14 USPQ2d 1056. Therefore it would be obvious to one skilled in the art at the time of the invention to modify Sizer to have the maximum total deformation during the bending into a curved shape to be less than 2%.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. ('616) in view of Pringle ('471).

Priestman et al. discloses the method according to claim 12 but does not disclose that the borehole is held sealed against the tube and wherein an overpressure prevails under the sealing. Krall teach (see Fig. 3) wherein a borehole (2) is held sealed (at 61) against a tube in the area of a well head and an over pressure prevails under the sealing. Krall teach that the seal is a blowout preventer (see col. 4, line 39-41). Blowout preventers are well known in art. Therefore it would be obvious to one skilled in the art at the time of the invention to modify the method disclosed by Priestman et al. to use a blowout preventer to seal the bore against the tube as taught by Krall because blowout preventers are common in the art.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. ('616).

Priestman et al. discloses the method of claim 14 but does not disclose the welding occurs in a screened space. However, welding normally takes place in a screened space to protect the surrounding area from stray sparks. Therefore it would be obvious to modify Priestman et al. to have the welding occur in a screen space to protect the surrounding area from stray sparks.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. ('616) in view of Sizer ('345)

Priestman et al. disclose a method for retracting or removing a tube from a borehole in the ground, comprising the actions of retracting at least a substantial portion of said tube (12) from said borehole (see col. 4, lines 11-14), axially displacing said tube from said borehole (11) towards a connecting area, said connecting area being located at least horizontally spaced away from the borehole, and that said axial displacement of said tube from said borehole to said

connecting area proceeding along an at least partially curved path, characterized in that portions of said tube or said composed section thereof proceeding along said curved path are bent into at most one single curve (at 38). Priestman et al. does not disclose and disconnecting tube parts from the tube in the connecting area. Sizer teaches a method of removing a tube from a borehole (see col. 7, lines 5-8) and disconnecting tube parts from said tube in said connecting area (see col. 7, lines 55-57). Sizer teaches that the tube parts are disconnected in order to store them (see col. 7, lines 31-34). Therefore it would be obvious to one skilled in the art at the time of the invention to modify the method disclosed by Priestman et al. to disconnect the tube parts from the tube as taught by Sizer in order to store the tube parts.

12. Claims 18-19,22-24,27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. ('616) in view of Pringle et al. ('951).

Priestman et al. disclose (see Fig. 2) an installation for composing a tube and introducing same into a borehole in the ground, comprising a connection structure (see col. 4, lines 20-24) for composing the tube (12) by connecting successive tube parts (see col. 4, lines 20-24) end-to-end in a connecting area, and a transport structure (28) for axially displacing said tube or a composed section thereof from the connection structure towards a bore hole (11), and for introducing at least a substantial portion of said tube or said composed section thereof into said well head, said connecting area being located at least horizontally spaced away from, and said transport structure being arranged for axially displacing said tube or said composed section thereof along an at least partially curved path (at 28), characterized in that said transport structure is arranged for bending portions of said tube or said composed section thereof proceeding along

said curved path into at most one single curve. Priestman et al. does not disclose a well head. Pringle et al. teach that well heads are well known in the art (see col. 3, lines 1-3). Therefore it would be obvious to one skilled in the art at the time of the invention to modify Priestman et al. to have a well head as taught by Pringle et al. because they are well known in the art.

Referring to claim 19, Priestman et al. disclose (see Fig. 2) an installation for composing a tube and introducing same into a borehole in the ground, comprising a connection structure (see col. 4, lines 20-24) for composing the tube (12) by connecting successive tube parts (see col. 4, lines 20-24) end-to-end in a connecting area, and a transport structure (28) for axially displacing said tube or a composed section thereof from the connection structure towards a bore hole (11), and for introducing at least a substantial portion of said tube or said composed section thereof into said well head, said connecting area being located at least horizontally spaced away from, and said transport structure being arranged for axially displacing said tube or said composed section thereof along an at least partially curved path (at 28), characterized in that said transport structure is arranged for bending each portion of said tube or said composed section thereof to a curved shape in exclusively one direction relative to that portion of said tube. Priestman et al. does not disclose a well head. Pringle et al. teach that well heads are well known in the art (see col. 3, lines 1-3). Therefore it would be obvious to one skilled in the art at the time of the invention to modify Priestman et al. to have a well head as taught by Pringle et al. because they are well known in the art.

Referring to claim 22, Priestman et al. disclose wherein said transport structure comprises: a bending machine (28) for plastically bending tube material to a curved form, having

an inlet for leading in tube material to be bent, in line with a portion of said path section connected to and downstream of said connection structure.

Referring to claim 23, Priestman et al., as modified, disclose wherein said transport structure further comprises a bending-back machine (15) for plastically straightening tube material from a curved form to an at least straighter form, said bending-back machine having an outlet for leading out tube material, located in line with a well head.

Referring to claim 24, Priestman et al., as modified, disclose wherein said bending machine (28) is reciprocable between a run-in position with an inlet for leading in tube material (12) to be bent in line with, a supply path section connected to and downstream of the connection structure, and a run-out position along a vertical portion (see Fig. 2, at element 12 to the left) of said path substantially parallel to a main passage of a well head.

Referring to claim 27, Pringle et al. teach a sealing (see col. 2, lines 65-68) for sealing a well head against a tube or a composed section thereof for preventing fluid from flowing out of a borehole.

Referring to claim 28, Priestman et al. disclose wherein said connection structure (see col. 4, lines 20-24) is in the form of a welding device.

Referring to claim 29, Priestman et al., as modified, discloses the installation of claim 28 but does not disclose that the welding device has a screening surrounding the welding device. However, welding devices normally have screening surrounding them to protect the surrounding area from stray sparks. Therefore it would be obvious to modify Priestman et al. to have the welding device be surrounded with screening to protect the surrounding area from stray sparks.

Allowable Subject Matter

13. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: It would not be obvious to modify Priestman et al. to have the at least partially curved path have a smallest radius, and the bending machine arranged for applying a plastic deformation which results in a radius in unloaded condition that is greater than the smallest radius of the at least partially curved path.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 7:30-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

gmc
January 24, 2003

Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670